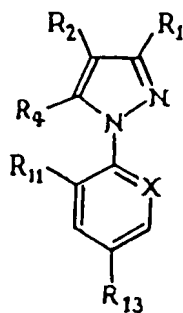


as determined in a test providing the reinfestation of the pet with 50 ± 3 three ticks, comprising a matrix in which is incorporated from ~~0.1 to 40%~~ ^{1 to 15%} by weight, relative to the [collar] external device, of a substance which is active against fleas and ticks, this active substance being formed of at least one compound corresponding to formula (I) below



(I)

in which:

R₁ is CN or methyl or a halogen atom;

R₂ is S(O)_nR₃ or 4,5-dicyanoimidazol-2-yl or haloalkyl;

R₃ is alkyl or haloalkyl;

R₄ represents a hydrogen or halogen atom; or a radical NR₅R₆, S(O)_mR₇, C(O)R₇, C(O)O-R₇, alkyl, haloalkyl or OR₈ or a radical -N=C(R₉) (R₁₀);

R₅ and R₆ independently represent a hydrogen atom or an alkyl, haloalkyl, C(O)alkyl, alkoxycarbonyl or S(O)_rCF₃ radical; or R₅ and R₆ may together form a divalent alkylene radical which may be interrupted by one or two divalent hetero atoms, such as oxygen or sulphur;

R₇ represents an alkyl or haloalkyl radical;

R₈ represents an alkyl or haloalkyl radical or a hydrogen atom;

Contd. Ca 1

R_9 represents an alkyl radical or a hydrogen atom;

R_{10} represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or groups such as OH, -O-alkyl, -S-alkyl, cyano or alkyl;

R_{11} and R_{12} represent, independently of each other, a hydrogen or halogen atom, or CN or NO_2 ;

R_{13} represents a halogen atom or a haloalkyl, haloalkoxy, $\text{S}(\text{O})_q\text{CF}_3$ or SF_5 group;

m , n , q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical $\text{C}-R_{12}$, the other three valency positions of the carbon atom forming part of the aromatic ring;

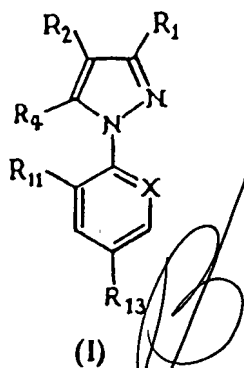
with the proviso that when R_1 is methyl, either R_3 is haloalkyl, R_4 is NH_2 , R_{11} is Cl, R_{13} is CF_3 and X is N; or R_2 is 4,5-dicyanoimidazol-2-yl, R_4 is Cl, R_{11} is Cl, R_{13} is CF_3 , and X is $=\text{C}-\text{Cl}[:]$

[this collar or other external device being designed to ensure more than 6 months of efficacy against fleas and more than 3 months of efficacy against ticks, the efficacy preferably being maintained for several weeks even if the collar or other external device is taken off or lost or if there is a variation in the release of the compound (I) by the matrix].

Please add the following new claims 48-52:

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~~48.~~ Anti-flea and anti-tick device according to claim 1 wherein the device ensures more than six months of efficacy against fleas and more than three months of efficacy against ticks.

a2
49. Method for eliminating fleas and ticks from cats and dogs comprising:
attaching to the cats and dogs at least one external device which comprises a matrix incorporating from 0.1 to 40% by weight, relative to the [collar] external device, of a substance which is active against fleas and ticks, this active substance being formed of at least one compound corresponding to formula (I) below



in which:

R₁ is CN or methyl or a halogen atom;

R₂ is S(O)_nR₃ or 4,5-dicyanoimidazol-2-yl or haloalkyl;

R₃ is alkyl or haloalkyl;

R₄ represents a hydrogen or halogen atom; or a radical NR₅R₆, S(O)_mR₇, C(O)R₇, C(O)O-R₇, alkyl, haloalkyl or OR₈ or a radical -N=C(R₉) (R₁₀);

Amended
2

R_5 and R_6 independently represent a hydrogen atom or an alkyl, haloalkyl, C(O)alkyl, alkoxycarbonyl or S(O)_rCF₃ radical; or R_5 and R_6 may together form a divalent alkylene radical which may be interrupted by one or two divalent hetero atoms, such as oxygen or sulphur;

R_7 represents an alkyl or haloalkyl radical;

R_8 represents an alkyl or haloalkyl radical or a hydrogen atom;

R_9 represents an alkyl radical or a hydrogen atom;

R_{10} represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or groups such as OH, -O-alkyl, -S-alkyl, cyano or alkyl;

R_{11} and R_{12} represent, independently of each other, a hydrogen or halogen atom, or CN or NO₂;

B

R_{13} represents a halogen atom or a haloalkyl, haloalkoxy, S(O)_qCF₃ or SF₅ group;

m , n , q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical C- R_{12} , the other three valency positions of the carbon atom forming part of the aromatic ring;

with the proviso that when R_1 is methyl, either R_3 is haloalkyl, R_4 is NH₂, R_{11} is Cl, R_{13} is CF₃ and X is N; or R_2 is 4,5-dicyanoimidazol-2-yl, R_4 is Cl, R_{11} is Cl, R_{13} is CF₃, and X is =C-Cl;

allowing external device to remain in place in order for compound (I) to be taken up by the animal's sebum and distributed over the animal's entire body, and to be concentrated in the sebaceous glands which become a reservoir for formula (I),

in such a manner that it ensures more than six months of efficacy of more than 95% against fleas, as determined in a test providing reinfestation with 100 ± 10 fleas, and more than three months of efficacy of greater than 90% against ticks, as determined in a test providing reinfestation with 50 ± 3 ticks, and that one obtains efficacy during several weeks against ticks and fleas, if the collar or other external is taken off or lost and if there is a variation in the rate of release of the formula (I) by the matrix.

50. Method according to claim 49 wherein the external device is left in place for at least 24 hours.

51. Method according to claim 49, wherein one obtains an efficacy of two to three months against fleas if the external device is taken off or lost or if there is a variation in the rate of release of the formula (I) by the matrix.

52. Method according to claim 49, wherein one obtains an efficacy of one to two months against ticks if the external device is taken off or lost or if there is a variation in the rate of release of the formula (I) by the matrix.--

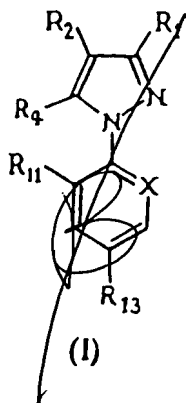
Please cancel claim 12 on page 26, lines 22 and 23.

Please cancel claims 39 and 41 without prejudice.

Please amend the claims as follows:

Claim 11, line 5, delete "and its derivatives".

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-21. (Amended) Method for eliminating fleas and ticks from pets to ensure more
than six months of efficacy of greater than 95% against fleas, as determined in a test
providing the reinfestation of the pet with 100 ± 10 fleas, and more than three months
of efficacy of greater than 90% against ticks, as determined in a test providing the
reinfestation of the pet with 50 ± 3 three ticks, [in particular cats and dogs, in which one
attaches] comprising attaching to the pets at least one [collar or other] external device
[which comprises] having a matrix into which is incorporated a compound corresponding
to formula ~~(I)~~ below:



in which:

R_1 is CN or methyl or a halogen atom;

R_2 is $S(O)_nR_3$ or 4,5-dicyanoimidazol-2-yl or haloalkyl;

R_3 is alkyl or haloalkyl;

R_4 represents a hydrogen or halogen atom; or a radical NR_5R_6 , $S(O)_mR_7$, $C(O)R_7$, $C(O)O-R_7$, alkyl, haloalkyl or OR_8 or a radical $-N=C(R_9)(R_{10})$;

R_5 and R_6 independently represent a hydrogen atom or an alkyl, haloalkyl, $C(O)$ alkyl, alkoxy carbonyl or $S(O)_rCF_3$ radical; or R_5 and R_6 may together form a divalent alkylene radical which may be interrupted by one or two divalent hetero atoms, such as oxygen or sulphur;

R_7 represents an alkyl or haloalkyl radical;

R_8 represents an alkyl or haloalkyl radical or a hydrogen atom;

R_9 represents an alkyl radical or a hydrogen atom;

R_{10} represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or groups such as OH, -O-alkyl, -S-alkyl, cyano or alkyl;

R_{11} and R_{12} represent, independently of each other, a hydrogen or halogen atom, or CN or NO_2 ;

R_{13} represents a halogen atom or a haloalkyl, haloalkoxy, $S(O)_qCF_3$ or SF_5 group;

m, n, q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical C-R₁₂, the other three valency positions of the carbon atom forming part of the aromatic ring;

with the proviso that when R₁ is methyl, either R₃ is haloalkyl, R₄ is NH₂, R₁₁ is Cl, R₁₃ is CF₃ and X is N; or R₂ is 4,5-dicyanoimidazol-2-yl, R₄ is Cl, R₁₁ is Cl, R₁₃ is CF₃, and X is =C-Cl[:]

[which method ensuring prevention and treating fleas and ticks to a high degree of efficacy and other a period exceeding 6 months against fleas and 3 months against ticks, the efficacy preferably being maintained over several weeks even if the collar or external device is taken off or if there is a variation in the release of the compound (I) by the collar or the external device].

- Claim 31, line 5, delete "and its derivatives."
Claim 32, line 2, delete "proportion" and insert --concentration--.
Claim 33, line 2, delete "proportion" and insert --concentration--.
Claim 34, line 2, delete "proportion" and insert --concentration--.
Claim 35, line 2, delete "proportion" and insert --concentration--.
Claim 36, line 2, delete "proportion" and insert --concentration--.
Claim 37, line 2, delete "proportion" and insert --concentration--.
Claim 38, line 2, delete "proportion" and insert --concentration--.
Claim 44, lines 1-2, delete "long-lasting".
Claim 45, lines 1-2, delete "long-lasting".